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Nikita Klymenko, student
Kyiv Aviation Institute, Kyiv

CERTIFICATION OF TEXTILE: OBTAINING OF GOTS 7.0 CERTIFICATE

Abstract. *Textile certification is gaining importance amid the global environmental crisis and the push for sustainable development. As one of the most polluting industries, the textile sector impacts water, energy, and emissions across its entire lifecycle. Certification helps ensure environmental, social, and ethical standards, with programs like GOTS promoting transparency, worker protection, and reduced chemical use. It supports the shift toward a circular, sustainable textile industry and more responsible consumer behavior.*

Keywords: textile certification, principles, GOTS, sustainable textiles, organic fibers, environmental standards, social responsibility, chemical restrictions, sustainable development, circular economy, non-toxic production, fair labor practices, organic cotton.

Textile certification is an official confirmation of the compliance of textile products with certain quality, safety, environmental, and social responsibility standards. It is carried out by authorized independent organizations based on established criteria covering a textile product's entire life cycle - from raw materials to the final product.

The main goals of textile certification are environmental safety, sustainable production, social responsibility, and supply chain transparency. After all, a textile product is free from substances hazardous to human health and the environment (heavy metals, formaldehyde, pesticides, etc). All processes, from growing raw materials to the final product on store shelves, must be controlled by resource use, emissions reduction, prohibition of toxic dyes and chemicals, and energy and water efficiency technologies. Companies must respect the rights of employees, prohibit child labor, and ensure decent working conditions.

One of the most famous environmental textile certificates is GOTS (Global Organic Textile Standard), a certificate for organic textiles. The Global Organic Textile Standard (GOTS) is an internationally recognized certification system for organic textiles. Its goal is to ensure the organic status of textiles, from the cultivation of raw materials to the labeling of the final product through environmentally and socially responsible production. GOTS creates a reliable guarantee for consumers that a product labeled

"organic" meets strict requirements, contains organic fibers, and is produced in compliance with environmental and social standards.

GOTS is a voluntary certificate (i.e., not a law) that works in parallel with national organic agricultural standards, covering all stages of processing organic fiber into textiles. The standard covers a wide range of products, including fibers, yarns, fabrics, clothing, home textiles, textile toys, mattresses, personal care products made from textiles, and even textiles in contact with food - provided they are made from at least 70% organic natural fibers. Products with lower organic fiber content cannot be certified under GOTS.

GOTS certification covers the entire textile supply chain, which is how quality is guaranteed. All producers, processors, and traders who want to label their products as GOTS certified must obtain the certificate themselves, meaning that every participant in the chain must be inspected, from spinning, dyeing, and weaving to sewing and trading.

It should be noted that GOTS does not certify agricultural production but requires that the raw fiber be certified organic in accordance with a recognized standard, such as the EU Organic Regulation, USDA Organic, NPOP (India), etc. The certification is carried out by an independent certification body that is GOTS-approved and accredited to ISO 17065 (or equivalent). These bodies conduct annual on-site audits. If risks are identified, audits may be scheduled.

To maintain certification, a company must be subject to annual audits, maintain documentation for each batch of organic goods (invoices, certificates, recipes, ingredients), ensure traceability of organic fibers and products, use only approved chemicals from the GOTS Positive List, ensure separate storage and labeling of organic and non-organic products. One of the main principles of GOTS is the requirement for organic fiber content. Accordingly, a textile product must contain at least 70% certified organic fibers (by weight) to meet the standard's requirements.

There are two main categories of labeling:

- "Organic" means that the product contains at least 95% organic fibers.
- "Made with X% organic materials" - for products with 70-94% organic fibers. In

this case, the exact percentage must be indicated on the label.

Organic fibers must come from farms certified to official organic standards such as the EU Organic Regulation, USDA Organic, or NPOP (India). Fibers in transition to organic status ("organic in-conversion") are also allowed. If the product contains less than 100% organic fibers, additional fibers are allowed (up to 5% for the "organic" category and up to 30% for "made with..."), but they must be present: GOTS allowed (e.g., hemp, linen, silk, recycled polyester). GOTS prohibits mixing organic and non-organic versions of the same fiber (e.g., organic and conventional cotton cannot be mixed). Textile processing often involves the use of many chemicals.

The GOTS strictly regulates their use - only chemicals on the GOTS Positive List are allowed to be used among the prohibited substances: chlorinated solvents, phthalates (plasticizers), alkyl phenol ethoxylates (APEOs), formaldehyde, perfluorinated compounds (PFAS), nanoparticles (<100 nm), organic tin compounds (e.g. TBT, DBT), and genetically modified enzymes, starch, fats. All substances with a GHS hazard

classification, such as carcinogenic (H350), mutagenic (H340), reproductive toxic (H360), etc., are also prohibited.

GOTS sets strict environmental and social standards for the textile industry. Certified companies must follow national environmental laws, have a written policy on chemical use, monitor resource consumption, aim for renewable energy, and train staff in environmental safety. GOTS adds the requirement to measure and reduce greenhouse gas emissions. Wet-processing facilities must treat wastewater, meet specific chemical and temperature limits, test water quality, and dispose of waste responsibly—banning on-site incineration or illegal dumping. Noise and air emissions must also be controlled if legally required. Socially, GOTS ensures ethical labor conditions, including no child or forced labor, fair wages, safe working environments, gender equality, and protection of all workers' rights.

To get GOTS certified, a company must apply to an approved certification body and undergo an initial audit that checks fiber origin, environmental practices, chemical use, working conditions, documentation, and labeling. If all requirements are met, the company receives a Scope Certificate. To maintain certification, the company must pass annual inspections, comply with all GOTS requirements, adapt to updates (e.g., GOTS 7.0 became effective in March 2024), and issue transaction certificates for each certified sale. Additionally, the company must keep detailed records of deliveries, batches, and chemicals and ensure strict separation of organic and non-organic products. The company must also keep records of all deliveries, batches, and chemicals and separate organic and inorganic products. The GOTS is revised every three years.

Conclusions. Obtaining certification for textiles is a complex process that requires an organization to meet standards in many areas. Maintaining this certification is an ongoing commitment: it requires careful documentation, regular training, monitoring, and periodic audits. GOTS is not just a fiber standard but a complete product standard that encompasses environmental and social responsibility. Companies that manage to do this can sell their products with a GOTS certificate, signaling to the market that their textiles are genuinely organic and responsibly produced.

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Scientific Supervisor – T.V. Saienko, D. of Ped.Sc., Prof